

Alberta Transportation and Utilities Annual Report 1993/94

CANADIANA

FEB 20 1997



TRANSPORTATION
AND UTILITIES

Office of the Minister
425 Legislature Building
Edmonton, Alberta
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403/427-2080

The Honourable
Gordon Towers
Lieutenant-Governor
Province of Alberta

Sir:

I have the honour to submit to you the Annual Report of Alberta Transportation and Utilities for the fiscal year ending March 31, 1994.

Yours truly,

A handwritten signature in dark ink, appearing to read "S. West", written over a horizontal line.

Stephen C. West
Minister

1993/94 ANNUAL REPORT

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DEPUTY MINISTER'S MESSAGE

This year saw work begin on the development of the department's three year business plan and the year also carried the greater portion of the expenditure reductions planned over the next few years. This is in keeping with the department's continuing commitment to a more streamlined and effective operation.

The department was re-organized during the fiscal year, with its six divisions being reduced to four allowing two Assistant Deputy Minister positions to be eliminated. The Support Programs division was eliminated as well as the position of Assistant Deputy Minister responsible for Motor Transport Services. The area now reports to the Chairman of the Motor Transport Board.

Restructuring also took place through the elimination of one of the five regions in the province. The Northeast Regional office in St. Paul was closed along with two district offices. Other districts were incorporated into the remaining four regions.

In support of the government's commitment to get out of the business of doing business, the department has increased the use of contractor supply of material on all contracts. We also moved to End Product Specifications for all paving contracts during this fiscal year and included the roadbuilding industry as a partner in construction specification development.

Partnership also played a role in the department's work with the motor carrier industry, and with other stakeholders to emphasize safety on Alberta's highways. As well, the devolution process for road authorities gained momentum, with six improvement districts taking responsibility for road authority by March 31, 1994.

As part of its contribution to the government's objective of a balanced budget, the department began work on a process that will make it the first provincial transportation department to be funded on a user-pay basis. Revenues generated through motor vehicle fuel taxes, vehicle registration, driver's license and other user fees will be used to offset department expenditures.

The department's mission is to ensure that Albertans are served by a safe, efficient transportation system and essential utility services necessary for a prosperous economy and a good quality of life at an affordable cost. The steps discussed in this annual report indicate that the department continues to achieve its mission and serve the people of Alberta.

A handwritten signature in dark ink, appearing to read 'H. Alton' with a stylized flourish.

Harvey M. Alton

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PROVINCIAL TRANSPORTATION

REGIONAL REORGANIZATION

The division undertook significant restructuring during 1993/94. The northeast regional office in St. Paul as well as the Stettler and High Prairie district offices were closed. Additionally, the Medicine Hat, Edson and High Level district offices were designated as district sub-offices reporting to the Lethbridge, Edmonton and Peace River district offices respectively. As part of the process, the boundaries of several districts were revised. In head office consolidation of several functions enabled significant efficiencies to be achieved. The new organizational structure recognizes work levels are declining and will enable the division to deliver its products and services to the public more cost-effectively while continuing to maintain high service standards. The reorganization was implemented with minimal impact to the public.

TRANSFER OF ROAD AUTHORITY TO IMPROVEMENT DISTRICTS

Early in 1993, the department began negotiations with a number of the 16 improvement district councils for the transfer of road authority from the department to the improvement districts. By March 31, 1994, six improvement districts had reached agreement for the takeover of all secondary highways, local roads, and forestry roads. The primary highway system remains with the department. Included with each agreement was a specified yearly transitional funding commitment by the department to assist the improvement district with their new responsibilities. The six improvement districts that have assumed road authority are Improvement Districts 14, 15, 16, 17 West, 20 and 23. Negotiations are continuing and it is expected agreement will be reached with a number of additional improvement districts during 1994/95.

CONSTRUCTION AND MAINTENANCE: ACCOMPLISHMENTS AND INITIATIVES

Construction

Road and bridge construction and a variety of preventative maintenance measures provide safe and efficient transportation systems for users of Alberta's highways. During the year, many construction and

maintenance initiatives were completed to satisfy this department objective.

Construction was undertaken on 2173 kilometres of primary and secondary highways, resource, park and approach roads. In 1993, 16.8 million cubic metres of earth were moved primarily through unit price contract and about seven million cubic metres of grading were undertaken by private sector contractors through lump sum contracts or day labour. A quantity of granular base course construction totalling 4.92 million tonnes was placed in 1993.

Approximately 276 thousand tonnes of cement stabilized base course were laid and 2.67 million tonnes of asphaltic concrete were mixed and placed.

The following major initiatives were undertaken in 1993/94:

- **CANADA-ALBERTA STRATEGIC HIGHWAY IMPROVEMENT PROGRAM**

(SHIP): SHIP is part of the Strategic Capital Investment Initiative contained in the Economic and Fiscal Statement delivered by the House of Commons on December 2, 1992. It was recognized that both governments must work together in areas of shared responsibility to achieve common economic goals. Early in 1993, the Province of Alberta negotiated federal assistance and signed agreements with specific commitments that will strengthen Alberta's economy and its ability to compete globally. The commitment of SHIP was an agreement to invest \$60 million to upgrade the infrastructure of major highways termed critical to industry's ability to get products to market. In 1993 projects were undertaken on Highways 1, 2, 16 and 43.

- **HIGHWAYS 1 AND 16 FOUR-LANING PROGRAM:**

The major initiative to four-lane Trans Canada Highway 1 and 16 was completed in 1991. This program was initiated in 1981 as a 10 year government commitment. Under this program, a total of 416 kilometres of the Yellowhead Highway (Trans Canada Highway 16) and 282 kilometres of Trans Canada Highway 1 have been four-laned. Additional work was undertaken in 1993 to four-lane Highway 1 east of Irvine to the Saskatchewan boundary. Both Trans Canada Highways are now four-laned from the Saskatchewan boundary to east of the Banff/Jasper federal park boundaries and this program has been completed.

- **ALBERTA PACIFIC PULP MILL TRANSPORTATION INFRASTRUCTURE:**

Construction was started on the transportation infrastructure required to serve the Alberta Pacific Pulp Mill at Athabasca in 1991. Seven projects were

worked on by private contractors. This initiative has now been completed.

- **EXPORT HIGHWAY PROGRAM:** This program, designed to complete four-laning of Highway 2 and Highway 3 from Calgary to Lethbridge, was initiated in 1989. In 1993 construction was undertaken on two projects. One was on Highway 2 from the junction of Highway 3 to the junction of SH 785. The other was on Highway 3 from junction Highway 2 to Fort Macleod. Both projects are funded under SHIP and are expected to be completed in 1994. A total of 72.6 kilometres of four-laning has been completed.

- **HIGHWAY 43 SAFETY IMPROVEMENTS:**

This project, funded under SHIP, involved the selective rehabilitation of existing pavement and enhancement of overall safety standards by providing climbing lanes, intersectional treatments and sideslope improvement from north of Whitecourt to Fox Creek, a distance of 58.2 kilometres.

- **HIGHWAY 2 MEDIAN WIDENING:** Work continued on this initiative with a contract from north of Carstairs to north of the Didsbury Interchange. When completed this program will enhance the safety and improve the operation of Highway 2 between Airdrie and Red Deer. This project was funded under SHIP.

- **HIGHWAY 63 RELOCATION PROGRAM:**

Under a joint venture with Syncrude Canada Ltd., construction of a new road through a depleted portion of the mine site commenced in 1993. Under this arrangement, the majority of the costs will be funded by Syncrude with a \$2 million contribution by the department. In 1993/94 the department directly funded 2.8 kilometres of grading. The new highway will be completed to a paved standard by the end of 1994.

- **SECONDARY HIGHWAYS PARTNERSHIP PROGRAM:**

In 1993/94 a partnership program to upgrade secondary highways in the province was developed. The new program will see the department cost-share secondary highway improvements with local road authorities. The program will be implemented for the 1994/95 construction season.

- **AVIATION:** In 1993/94, fog seals were applied to Jasper/Hinton and Manning. Drainage improvements continued at Cooking Lake, Manning and Red Deer. Financial assistance was provided to Sundre for the paving of runway safety areas and to Tofield for development area improvements. Runway approaches at Chipewyan Lake and Janvier were

improved.

• **CONSTRUCTION OF REST AREAS:** During 1993/94 fiscal year \$96 770 was spent for construction at the department's seven rest areas. This included washroom construction, landscaping and seeding at the Kininvie Rest Area, trailer dump station repair at Dickson-Stevenson Stopping House, power supply repair at Wandering River Rest Area and a new water well at the Valleyview Rest Area. Other minor expenditures were incurred at the Rosedale Suspension Bridge, Edson Rest Areas and the House River and Mariana Lake Pullouts. A grant was provided to the Town of High Level for rest area paving.

The eighth annual Highway Rest Stop Program took place on the Victoria Day long weekend at the Dickson/Stevenson Stopping House, Edson, Wandering River and Valleyview Rest Areas. The Independent Order of Foresters, in co-operation with local businesses, provided free refreshments to travellers who stopped at rest areas making Alberta highways a safer place to travel on the busy holiday weekend.

Maintenance

In 1993/94 the department maintained about 31 400 kilometres of primary highways, approach roads and improvement district roads through a network of 114 department maintenance facilities. Other maintenance responsibilities include 16 provincial airports, 50 forestry airstrips, seven ferries, six rest areas and the Civilian Air Terminal at Medley.

• **MAINTENANCE OF PROVINCIAL AIR FACILITIES:** Alberta Transportation and Utilities operates and maintains 16 certified provincial airports and 50 forestry airstrips to provide forest protection, medivac and general access to remote communities, recreation and business use and regular scheduled flight service. In 1993/94, three forestry airstrips were transferred to the local municipalities and nine strips were abandoned.

• **HIGHWAY CLEAN UP CAMPAIGN:** During the 1993/94 Highway Clean Up Campaign, a total of 8517 children and 4823 adults representing 524 clubs participated in cleaning Alberta's primary highway rights-of-way. Groups cleaned 8351 kilometres of right-of-way and collected 55 054 bags of litter.

• **MAINTENANCE AND OPERATION OF FERRIES:** During the 1993/94 operating season \$1 279 207 was spent on the operation and maintenance of the department's seven ferries. The

Finnegan Ferry continued to be operated by a private contractor. Sandblasting and painting of the Bleriot Ferry was completed. All ferry cables were inspected and repaired during shutdown.

• **HIGHWAY LINE PAINTING:** A portion of the 1993/94 highway line painting was contracted out to the private sector. Line painting contracts were successfully completed in the Southern and Barrhead Regions. The two contracts involved the repainting of all lines on 1676 kilometres of the provinces primary highway system. The private sector helped to supplement the department's efforts to complete the line painting program.

The following table shows the kilometres of line painted by regional paint crews.

1993/94 PROVINCIAL LINE PAINTING			
(Length of Roadway Painted by the Regional Paint Crews)			
Region	New Construction (KMS)	Repainting (KMS)	Total (KMS)
Southern	587	2 374	2 961
Central	457	1 885	2 342
Barrhead	771	3 165	3 936
Peace	470	1 767	2 237
	2 285	9 191	11 476
=====			

*All figures represent three line kms

• SNOW AND ICE REMOVAL

The following table illustrates the total metric tonnes of salt and sand used by the regions during the 1993/94 winter season.

Provincial Winter Materials Usage 1993/94

Region	Sand (Tonnes)	Salt (Tonnes)
Southern	95 770	15 483
Central	100 086	16 074
Barrhead	119 229	29 691
Peace	64 486	27 561
	379 571	88 808

=====

The following table compares the amount of sand and salt used over the last three years throughout the province. The amount of sand used this year represents a 59 per cent increase over the previous year while the amount of salt used this year represents a 33 per cent increase over the previous year. The cause of the substantial increase in materials used can be attributed to the more severe weather conditions. Generally Alberta experienced more snowfall and more icing conditions than in previous years. This resulted in more ice removal using more salt, and required the use of more sand for improved traction.

Annual Winter Material Usage

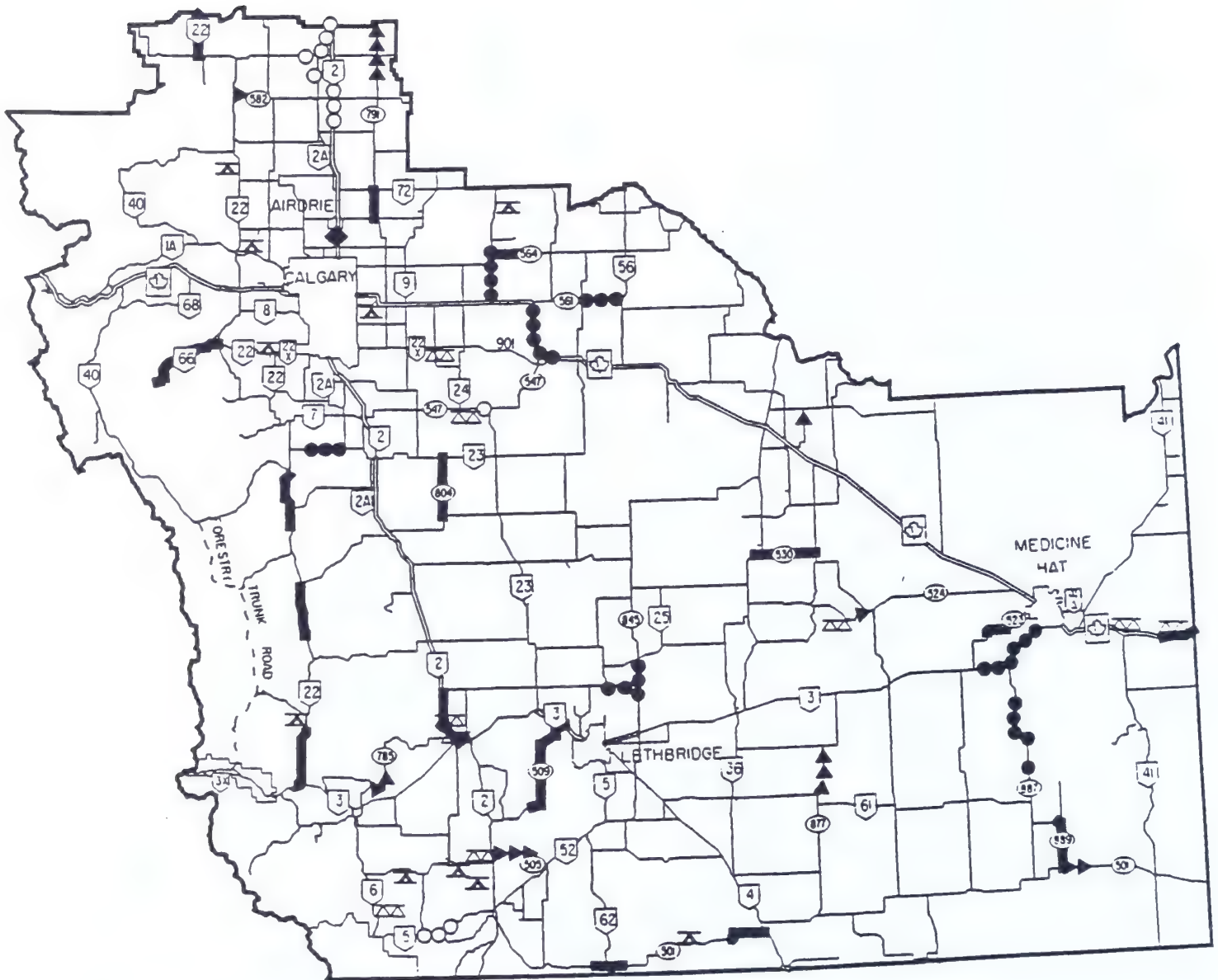
Material	91/92	92/93	93/94
Sand	224 570	239 150	379 571
Salt	81 900	66 780	88 808
	306 470	305 930	468 379

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1993 ANNUAL REPORT LEGEND - SOUTHERN REGION

▶▶▶▶	GRADING	⌵	BRIDGE REHABILITATION
▬	SURFACING	⌵	NEW BRIDGE CONSTRUCTION
●●●●	PAVEMENT REHABILITATION	◆	INTERCHANGE/GRADE SEPARATION
○ ○ ○ ○	RECONSTRUCTION	▬	EXISTING TWINNED HIGHWAY



SOUTHERN REGION

CONSTRUCTION

The region completed 21 of 33 contracts during the year. These contracts, administered by the department, involved 73 kilometres of grading, 112 kilometres of base course, 121 kilometres of paving, 139 kilometres of pavement overlay, 19 kilometres of combined construction, 28 kilometres of widening and reconstruction and 251 kilometres of seal coat. Other work included gravel crushing, stockpiling and pit reclamation projects. Guardrail, signing and seeding were included in the contracts as required.

The Strategic Highway Improvement Program (SHIP) was implemented in partnership with the Federal Government with the tendering of Highways 2 and 3 Interchange. This included the twinning of Highway 2 from the Oldman River to the junction of Highway 3 and Highway 3 into Fort Macleod, including the relocation of SH 810. Excellent progress was made on grading and bridge structures during 1993/94. Another project under this program was on Highway 2 north of the Carstairs Interchange to north of the Didsbury Interchange which involved median widening, widening of the highway and construction of service roads.

The last twinning project from east of Irvine to the Saskatchewan border was completed resulting in Highway 1 being twinned from the Saskatchewan border to the Banff gates. This project, approximately 11 kilometres in length, included bridges over Ross Creek and Mackay Creek, and overlay of the existing westbound lanes. Also, approximately 23 kilometres of overlay were completed on Highway 1 in the Gleichen area as part of the Highways 1 and 16 twinning program.

Work continued on the upgrading of Highway 5 from Cardston to Waterton with the second of three contracts being tendered and 60 per cent of the work being completed. Work commenced on the upgrading of Highway 24 at Mossleigh, which involved reconstruction of 5.67 kilometres of highway and the replacement of the bridge over West Arrowwood Creek.

Engineering consultants continued assisting local counties and municipal districts in managing 26 contracts, of which 21 were completed. Regular grants and special funding were provided to the counties, municipal districts, towns and villages for road/street improvement projects, dust control programs and secondary highway maintenance.

The bridge on Highway 6 over Dungarvan Creek was replaced with a concrete box culvert, while the bridge on Highway 22 over Dogpound Creek had its superstructure replaced. A new bridge was constructed on SH 505 over the main Environment Headworks Canal and a contract was tendered to rebuild two bridges on local roads over West Arrowwood Creek, southwest of Mossleigh and Mosquito Creek, near Nanton. Three bridges were rebuilt over the main Environment Headworks Canal in the Blood Indian Reserve. Roughly 65 smaller bridge structures and culverts were also constructed on the highway and local road system in the Southern Region this year.

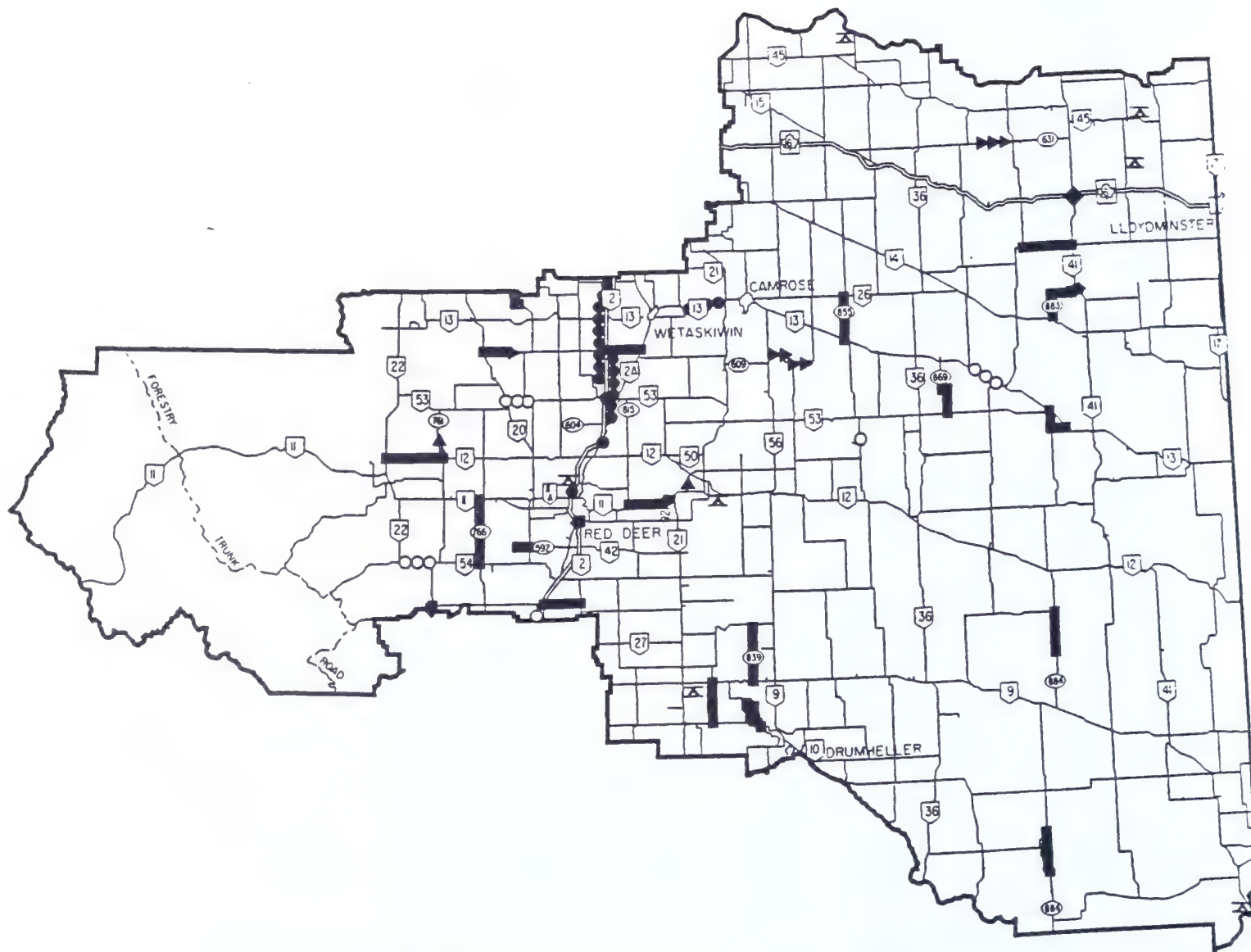
Some projects were delayed as spring and summer weather conditions in Southern Alberta were generally wetter than normal for the second straight year.

MAINTENANCE

The region continued with the privatization of summer maintenance tasks as well as ferry services. The Lethbridge District tendered a contract for 1248 kilometres of centre line re-painting. The Calgary District tendered selective patching on various highways throughout the district, this being the first of a three-year term. A number of erosion projects, involving installation of erosion blankets, ditch blocks, gabion structures, culverts and down drains of a remedial and preventative nature were completed.

Major bridge maintenance throughout the Southern Region included six painting projects, six polymer deck overlays, five concrete deck overlays, five sets of deck joints and one major strengthening project. In addition there were numerous smaller maintenance projects completed.

Winter conditions were again closer to normal with regular amounts of snowfall and cold periods.



1993 ANNUAL REPORT LEGEND - CENTRAL REGION

▶▶▶▶	GRADING	⌵	BRIDGE REHABILITATION
————	SURFACING	⌵⌵	NEW BRIDGE CONSTRUCTION
●●●●	PAVEMENT REHABILITATION	◆	INTERCHANGE/GRADE SEPARATION
○○○○	RECONSTRUCTION	———	EXISTING TWINNED HIGHWAY

CENTRAL REGION

CONSTRUCTION

The region completed 54 major contracts. Of these projects, 22 were managed by district staff and 32 were administered by counties and municipal districts with the assistance of engineering consultants.

A total of 80 kilometres of grading, 189 kilometres of base course and 79 kilometres of final paving was completed. Widening and reconstruction on 32

kilometres and 96 kilometres of pavement rehabilitation and 306 kilometres of seal coating was completed.

Major upgrading to Highway 16 continued with the final paving of the Vegreville Bypass, and work began on the construction of the diamond interchange at the junction of Highways 16 and 41. This interchange was part of the SHIP initiative. The overpass deck was in place by the end of March 1994, and it is expected that the overpass will be open for traffic by October, 1994.

Base surfacing was completed on SH 911 from SH 815 to west of Haynes Creek. This completed base surfacing on SH 911 from SH 815 to Highway 21. With this completion SH 911 was gazetted to Highway 11.

Three standard bridges and culverts were constructed or replaced on the primary highway system. Twenty-one standard bridges and culverts were constructed or replaced on the secondary highway and local road network.

MAINTENANCE

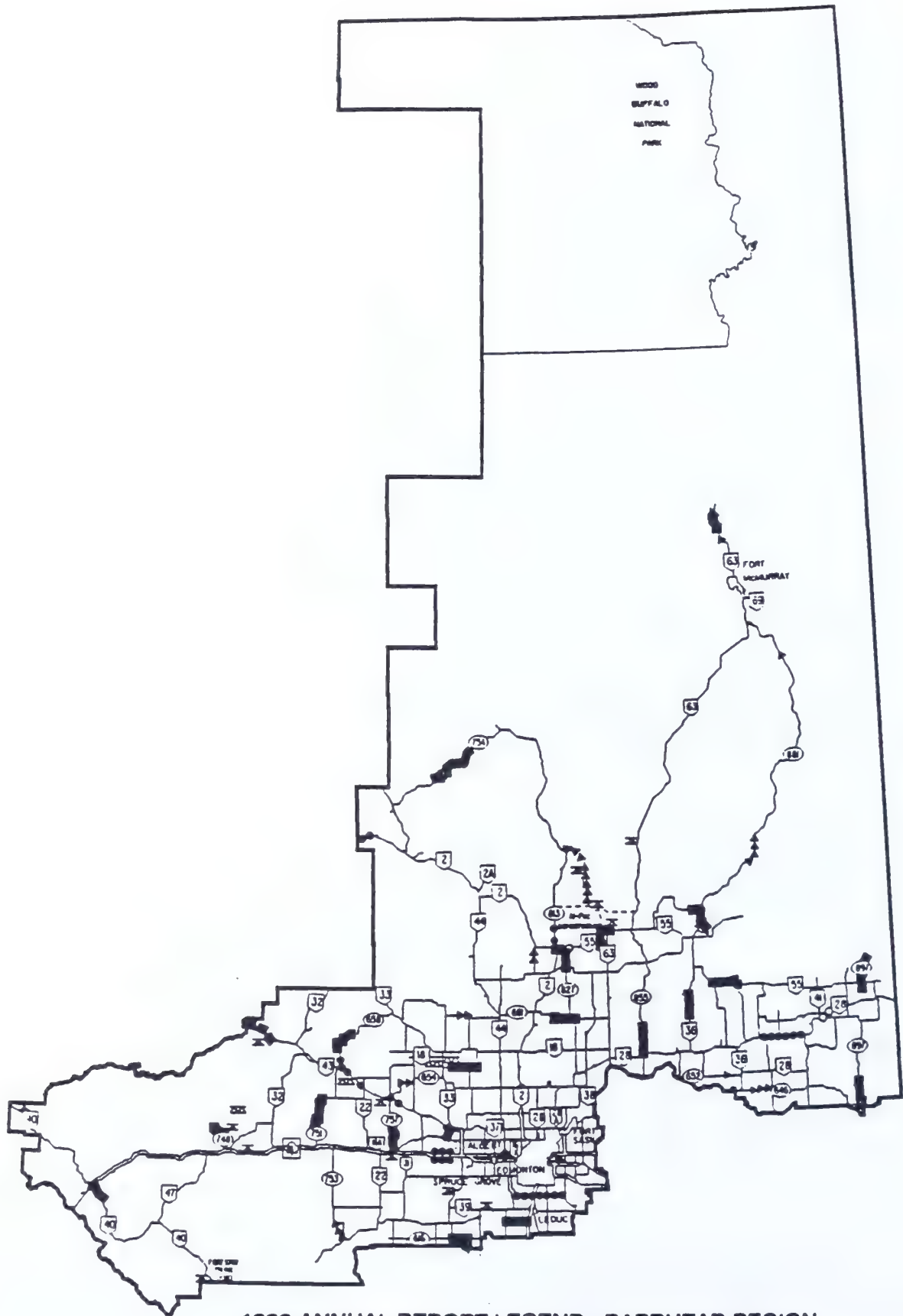
Extensive patching was undertaken on Highways 2, 9, 14, 15, 16, 41, and 45. This is expected to postpone the need for pavement rehabilitation for a number of years. Several innovations for patch and seal, and rut-only patching were successfully implemented.

Extensive bridge repairs were completed on Highway 21, Red Deer River at Content Bridge, and Highway 21, Three Hills Creek at Three Hills.

Good driving conditions were maintained throughout the winter. The use of salt was minimized to avoid problems with residue on the highway and excess leaching.

The Central Region received the 1993 Regional Employee Safety Award recognizing the achievement in reducing personal injury accidents. Additionally the Vermilion District shared in the Regional Safe Driving Award received by the previous Northeast Region.

Staff from the technical operations side undertook training in winter maintenance at maintenance facilities so that they could provide support services to the regular staff in future emergencies. This cross-training initiative is being implemented across the province and is working reasonably well.



1993 ANNUAL REPORT LEGEND - BARRHEAD REGION

- | | |
|------------------------------|--------------------------------|
| ▶▶▶▶ GRADING | ▨ BRIDGE REHABILITATION |
| ▬ SURFACING | ▨ NEW BRIDGE CONSTRUCTION |
| ●●●● PAVEMENT REHABILITATION | ◆ INTERCHANGE/GRADE SEPARATION |
| ○○○○ RECONSTRUCTION | ▬ EXISTING TWINNED HIGHWAY |

BARRHEAD REGION

CONSTRUCTION

Road construction on the ALPAC infrastructure was completed with minor clean up work scheduled for 1994/95. Consultants managed three grading projects while department staff managed three grading and one base paving project. In addition to the road work, the new bridge across the Athabasca River was opened and the new CN spur line from Boyle to the mill became operational.

Construction work continued on the major interchange project at the intersection of Highway 16X and SH 794. Due to unfavourable weather conditions this project was carried over and is now scheduled to be completed during the summer of 1994.

In total, work was undertaken on 108 kilometres of grading, 35 kilometres of base course and paving, 165 kilometres of base course, 75 kilometres of final paving and seven kilometres of combined construction. Approximately 117 kilometres of pavement rehabilitation and 176 kilometres of seal coat construction were also completed.

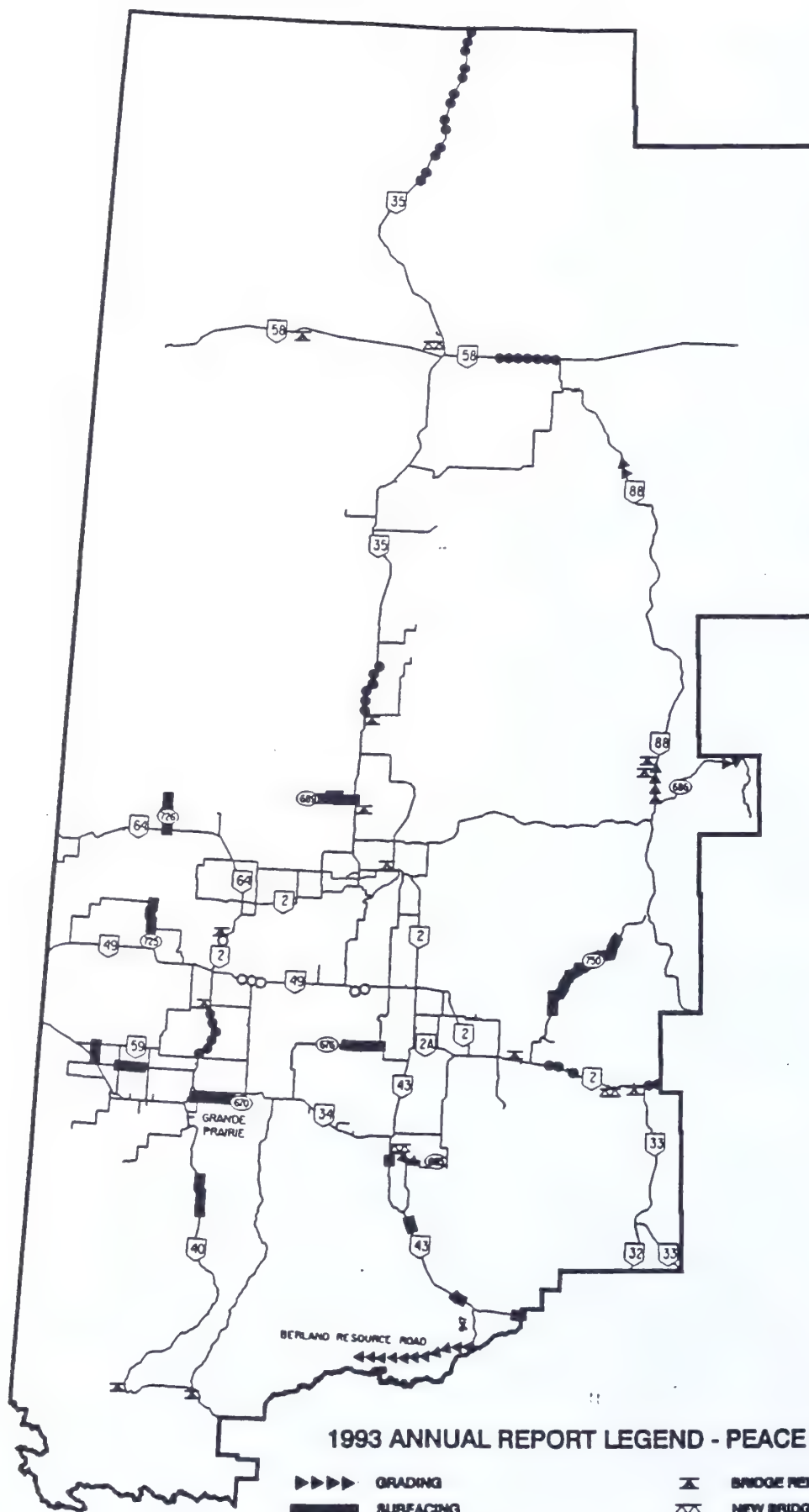
In the improvement districts 70 kilometres of local roads were upgraded, 1478 kilometres were regavelled and 105 kilometres were dust controlled.

Construction or reconstruction of 18 standard bridges and 33 standard bridge culverts was completed. As part of the Log Haul Upgrading Program, seven bridges were upgraded or reconstructed. On the ALPAC road construction four bridge culverts were installed.

MAINTENANCE

Summer maintenance activities consisted of crackfilling, mowing, patching, guardrail, signing and painting, and were accomplished with few problems. Centre line painting was contracted for a total of 2043 single line kilometres. As well 356 kilometres of crackfilling were contracted. Winter maintenance, with the record snowfall in January, resulted in a busy winter for snowplow operators. Reductions in staffing levels in airports and sharing of maintenance shop staff resulted in a decrease of expenditures in airport maintenance.

Repairs and maintenance were also made on 88 bridges and 11 bridge culverts.



1993 ANNUAL REPORT LEGEND - PEACE REGION

▶▶▶▶	GRADING	⌵	BRIDGE REHABILITATION
▬	SURFACING	⌵	NEW BRIDGE CONSTRUCTION
●●●●	PAVEMENT REHABILITATION	◆	INTERCHANGE/GRADE SEPARATION
○○○○	RECONSTRUCTION	—	EXISTING TWINNED HIGHWAY

PEACE REGION

CONSTRUCTION

This year saw an emphasis on new surfacing in the Peace Region along with a continued program of rehabilitation.

Construction on primary and secondary highways, approach, tourism, local and resource roads included a total of 55 kilometres of grading, 99 kilometres of base course and 91 kilometres of paving. Pavement rehabilitation included 114 kilometres of overlay.

In Improvement Districts and Indian Reserves, a total of 76 kilometres of grading, 3696 kilometres of gravelling and 108 kilometres of dust control were completed. Regravelling contracts and lump sum grading contracts have resulted in reduced costs. During the 1993/94 fiscal year, the transition of Improvement Districts has been progressing rapidly. At the end of 1993/94 only four Improvement Districts in this region had not accepted complete road authority.

The Regional Bridge Program centered on the Log Haul Upgrading Program with a total of 16 bridges upgraded and strengthened. The construction of the Island Creek Bridge on Highway 33 was commenced, as well as the Bushe River Bridge replacement on Highway 35 north of High Level.

MAINTENANCE

The favourable summer weather resulted in maintenance programs being successfully completed. The winter was characterized by very favourable conditions up to the end of December when the Region started to receive a very heavy snowfall. Considerable effort was required on winter maintenance, however, budget allocations were generally met.

Major maintenance expenditures for bridges included deck and sidewalk repairs on the Notikewin River Bridge on Highway 35 at Manning, deck joint replacement and concrete overlay on the East Prairie Bridge on Highway 2 east of High Prairie and maintenance painting on the Peace River Bridge at Peace River. Work also included structural repairs and concrete overlays on the Grouard Trail overpass and the Northern Alberta Railroad Spur overpass both on Highway 2 at Peace River. Painting on the Chinchaga River Bridge on Highway 58 was completed.

POLICY AND PLANNING

NATIONAL AND PROVINCIAL POLICY

A prosperous economy and good quality of life require an efficient, integrated transportation system, including road, rail, air and ports. The department represents Alberta's needs and interests in national forums, and develops provincial policies which respond to changing travel and trade patterns. The overall objective is to ensure that Albertans have access to the transportation infrastructure and services they need, whether these are under provincial or other jurisdictions and management.

In support of the government's deregulatory initiative, the department reviewed legislation and regulations with clients and stakeholders. Alberta Transportation and Utilities deregulation action plan recommended reducing the number of acts administered by the department from 17 to 15 and the number of regulations from 102 to 40. Proposals were also made to streamline many of the remaining acts and regulations.

During the year, a review was initiated with the City of Edmonton of the potential of developing the southwest Edmonton ring road as a toll facility. The review included the concept of financing the project as a partnership between the private and public sectors.

The financial uncertainty of Canadian Airlines International (CAI) required the department to be heavily involved in the future of Canada's competitive airline industry. The department successfully supported pro-competitive decisions by the National Transportation Agency (NTA), the Competition Tribunal and the federal Cabinet. Department-sponsored regulatory amendments which changed foreign ownership restrictions on Pacific Western Airlines (PWA) Corporation were essential in maintaining Canadian control yet permitting the restructuring of PWA's finances. With favourable decisions by all the regulatory bodies and continued support by employees, creditors and government, CAI was able to complete its transaction with American Airlines. CAI is now on the way to financial recovery.

To oversee the development of an Alberta Air Transportation Strategy, the department established a Steering Committee with representatives from the Calgary and Edmonton Airports Authorities, the City of Edmonton, and Alberta Economic Development

and Tourism. The Committee's initial priority was identifying joint activities by Calgary and Edmonton to maximize long-haul and international aviation opportunities for Albertans. Consultations were planned with smaller communities and the general aviation community to expand the Strategy to cover all parts of the province.

During the year, the department, along with other provinces and many Alberta communities and airport operators, maintained pressure on the federal government to resume the Canada/U.S. air bilateral negotiations.

In June, the federal government announced it intended to reform the Western Grain Transportation Act which provides subsidies to Canadian railways for transporting western grain to export. The intent of the announced reforms was to redirect the subsidy payments to the farmers, and to improve the overall efficiency of the western Canadian grain transportation system. The department worked closely with Alberta Agriculture, Food and Rural Development to ensure a positive impact on Alberta's shippers and farmers.

Early in 1994, CN North America and CP Rail Systems announced their intention to possibly merge their eastern operations. This restructuring was in response to massive losses which threatened the viability of their companies. The department worked independently and with other western provinces to determine the implications for Alberta and western Canada.

Alberta Transportation and Utilities continued to work with its Advisory Committee towards achieving the vision of barrier-free transportation in Alberta by the year 2000. Demonstration projects using accessible taxis in Edmonton, Medicine Hat and Barrhead, and an accessible bus on Greyhound's Calgary/Red Deer/Edmonton route were conducted. Greyhound not only provides accessible service on express trips between these cities with advance notice, but are now investigating ways of extending this service to other Alberta routes. Low-floor transit buses were in operation in Calgary, Edmonton and St. Albert. These buses provided easier access for seniors and persons with disabilities.

As part of the Alberta Government's net budgeting strategy, the department developed a funding process whereby the department's expenditures would be entirely offset by revenues generated through motor vehicle fuel taxes, vehicle registration, driver's licence, and other user fees. As of April 1, 1994, Alberta Transportation and Utilities became the first provincial transportation department to be funded on

a user-pay basis.

PLANNING ALBERTA'S TRANSPORTATION SYSTEM

Development of a safe and efficient highway system requires effective planning, including not only traffic and engineering analysis but also public and municipal consultations. Using traffic, economic and population trends, the department develops long range plans. These help set priorities for shorter term site-specific planning and for construction programs. Local development and municipal planning initiatives also result in many requests to review highway and access management plans. The department works co-operatively with municipalities to ensure that the provincial and municipal road systems are planned and developed as an integrated network.

Traffic on Alberta's highway systems showed notable growth from the previous year: 5.6 per cent on the primary highways and 5.3 per cent on the secondary highways. In previous years the average growth rate was in the order of three per cent annually. This pick-up in traffic is a clear indicator of a robust Alberta economy.

Traffic growth, industrial, tourism and residential development, and change trade patterns are creating pressures on the highways in a number of areas around Alberta. These are the focus of planning activities. During the year, consultations were held with municipalities, developers, landowners, local residents and road users to help prepare plans for many important highway improvements, including the following:

- Export Highway (Highways 2, 3 and 4) - Alberta has a long term initiative to four-lane an export highway corridor to the US border at Coutts. Such a corridor will better accommodate growing north/south trade and tourism. During the year, planning focussed on Highway 3 improvements such as the Bow River Crossing and interchange at Monarch and the interchange west of Fort Macleod.
- Highway 2 - This is Alberta's key north/south route, handling high volumes of both truck and automobile traffic. The speed restricted zone south of Red Deer has been a concern from a traffic flow and safety perspective; the zone also contains a number of commercial establishments which serve highway users and provide local employment. With the objective of developing a plan which can better handle traffic while maintaining good accesses to the local businesses, an engineering

consultant report was completed in 1993/94. It involved extensive local consultations to evaluate alternate planning proposals. A recommended plan was reviewed with the public at an Open House in April 1994.

- Highway 43 - Growing traffic due to forestry and other regional development necessitated a review of this important route.
- Highway 22X - The Calgary region continues to grow and alternate routes to the Trans Canada Highway are needed to accommodate regional and through highway traffic. Planning focused on alignment options for the eastward extension of Highway 22X from Highway 24 to the Siksika Nation. Broad-based public consultations and open houses were held to obtain input on these options.
- MD of Foothills (Highways 1, 2, 2A, 7, 8, 22 and 22X) - urbanization and industrial growth south of Calgary necessitated a review of the entire highway network. Public consultations and open houses were held in conjunction with the MD to obtain public input on plans.
- Cochrane (Highways 1A and 22 - Residential development in this town west of Calgary necessitated the preparation of plans to handle local access to the highway system.
- Bow-Canmore (Highways 1 and 1A) - Rapid tourism and residential growth in the Canmore area will create new pressures on the highway system, in particular for interchange improvements. The department worked closely with the town in 1993/94 to assess the impacts of local development plans on the highway system, and to review options to safely accommodate the forecast traffic.
- Highway 16 - Like Calgary, the region around Edmonton is experiencing residential and industrial expansion. During the year a review was initiated with the County of Parkland of the functions and plans of the highway system west of Edmonton.

With the economic recovery the department also saw an increase in the number of requests to review subdivision and development proposals along the highway system. Input was also provided to the government's initiative to review the Alberta Planning Act in order to streamline and reduce the regulatory burden. The amendments being considered will have an important affect on how access to highways is managed in the future. The department expects to develop Highway Access Management Agreements with local authorities rather than to rely on the regulated referral processes.

ENGINEERING

QUALITY ENGINEERING FOR QUALITY TRANSPORTATION SYSTEMS

The planning, design, construction, maintenance and operation of safe, cost-effective transportation systems requires quality engineering. An efficient combination of private sector and in-house engineering services is used by the department to provide such systems.

Mid-way through this fiscal year, a major reorganization within Engineering consolidated into one group, engineering design and standards activities related to road and pavement design, pavement management, utilities, traffic, aggregates, geotechnical, and testing and materials. And within bridge engineering, a significant shift in operations was made, moving more toward the role of maintenance/rehabilitation of the extensive bridge infrastructure.

Once again, new and enhanced geometric design standards and practices were developed and implemented including loghaul intersection design, modified subgrade cross-section for staged construction, installation of guardrail on base course, and curb ramp design for persons with disabilities. A new Highway Geometric Design Guide for use by departmental staff and consultants was completed. Departmental staff and the University of Alberta continued on the development of cost-effective geometric design improvements for existing paved roadways. Geometric assessments of all programmed pavement rehabilitation projects were completed and work continued to develop a multi-year geometric rehabilitation plan. Department geotechnical engineers were involved in the remediation of several major landslides in the Peace River to ensure safe highway travel and preservation of the infrastructure.

Further progress was made towards the development of the long range planning system (LRP) to ensure optimization of future expenditures with respect to bridge maintenance, rehabilitation and replacement.

In keeping with the department's policy of monitoring the condition of the paved roadway and bridge systems, the level of expenditure on the deck rehabilitation program on bridge structures associated with primary, secondary and local highway systems was increased from approximately \$6 million in 1992/93 to approximately \$7 million in 1993/94.

Grading designs continued to be shared effectively between the districts, at about 75 per cent of the total design workload, and head office, which continued to provide design service for twinning, interchange and fast-track projects. Ongoing advances were made in the cost, speed and quality of highway engineering through the development, implementation and integration of advanced survey technologies with computerized design and drafting systems.

In July of 1993, the provinces jointly forwarded a submission to the federal government in response to their request regarding the review of the cost apportionment guidelines for grade separation projects. Department staff played a key role in coming up with the joint submission.

Alberta Transportation and Utilities engineering staff continued to administer the log haul bridge upgrading program. This is a partnership with the logging industry to provide a network of roads adequate to accommodate a log haul loading of 55 tonnes gross vehicle weight. The logging industry contributed to the partnership and upgrading by paying a levy on the tonnage of logs hauled to their mills. Under this program a total of 26 major bridges were upgraded.

Departmental engineering staff developed and implemented the girder strengthening program for privatization. This noteworthy achievement addressed the previous concerns that it would be difficult to tender and administer these contracts. The privatization under this program was carried out in a very effective manner.

A departmental task force published and distributed guidelines for standards for consultants and initiated a regular dialogue with engineering consultants on the use and interpretation of the standards.

The use of Benkleman Beams to measure pavement strength has been entirely phased out with all pavement deflexion testing now being carried out by Falling Weight Deflectometers. As an ongoing continuation of 1992/93's progress, the interpretation of pavement strength test data was improved and a new and more sophisticated overlay design tool was transferred to pavement design engineers, resulting in a more effective use of pavement rehabilitation funds. Efforts to transfer new technology included the short term loan to the department of a mobile laboratory and testing equipment, developed for the US Strategic Highway Research Program, from the US Federal Highway Administration. Evaluation of materials and processes included a study on the effects of plant mixing on asphalt aging, the use of alternative solvents for trichloroethane, pavement reinforcement materials to mitigate reflective cracking and field

evaluation of polymer modified asphalts.

ENVIRONMENTAL MANAGEMENT

The department provides total environmental management services at all stages, from route selection and planning, design and construction, to post construction monitoring of environmentally sensitive areas. For the majority of grading projects, evaluation and follow-up are undertaken on: reclaimed borrow material locations, reclaimed abandoned roadways, water course crossings, stream diversion, drainage plans and any subsequent erosion problems.

All preliminary surveys, proposed roadway grading and gravel/sand sources were referred to the Archaeological Survey of Alberta. Numerous small archaeological sites required mitigation in order that construction could proceed.

The archaeological program at the junction of Highway 2 and 3 was finalized with extensive information collected. Monitoring of the site during construction was implemented to ensure that minimal disturbance of the sites occurred and that requirements of the Archaeological Survey were adhered to.

Construction of the Wagner Bog Interchange (Highway 16X and SH 794) continued with extensive environmental monitoring by environmental groups. All of their concerns were addressed during construction.

CONSTRUCTION CONTRACTS

A total of 230 roadway and 14 bridge contracts were tendered during 1993/94. Included in this total are 34 paving, 22 skid resistance surface treatment, 14 base and paving, 17 grade/base/pave, 65 local road grading, 15 major road grading, and 23 crushing, and 26 miscellaneous. The value of these contracts was approximately \$145 million. Included in the above totals are seven contracts for grading, paving, and skid resistant surface treatment on Highways 1 and 16.

Major advances have been made in the conversion of tender preparation from a manual to a computerized system. The trend to contracting many kinds of work formerly done by department crews has necessitated the consideration of a new more flexible computer system. As it is anticipated this trend will continue, specific system development needs were addressed.

The Construction Program Management System was modified to allow the tracking of all tenders in both the preparation and award stages. The Contracts Information System (CIS) was developed and designed to computerize this function from contract preparation and tendering, through to award, payments and claims.

During this fiscal year, all paving contracts used End Product Specifications (EPS). Specifications transferred responsibility for quality control, aggregates engineering and asphalt mix design to the contractor. End Product Specifications were broadened to include price adjustments for pavement segregation in order to continue to improve the quality of pavements being constructed. A total of 393 purchase orders, valued at approximately \$24 million was placed for highway construction material. This is a considerable reduction from the previous fiscal year's total, due to more EPS paving contracts being issued where the contractors are responsible for supplying asphalt and other materials.

Contractor supply of asphalt materials, which already included asphalt cement on paving projects and asphalt binder on seal coat projects, was also expanded to include asphalt binder and fog and prime coat materials on asphalt stabilized base course projects. Contractor supply of culvert and fence materials for construction projects was increased.

Standard requirements for 1993/94 construction projects required contractor supply of aggregates. For most projects, a department controlled aggregate source was provided as an option to allow all contractors the opportunity to bid on departmental projects. Contractors choosing to use department controlled sources were required to follow pit operating plans and the department recovered the cost of this aggregate material through the contract.

A total of 16 major bridges was completed during the 1993/94 construction season. Among these was the completion in August of the Athabasca River Bridge near Grasslands. This \$9 million bridge was designed and built to accommodate the infrastructure required for the ALPAC project. Construction was also completed on the Highway 16X/SH 794 Interchange west of Edmonton. Among the major bridge projects started during this fiscal year were the Oldman River Bridge on Highway 2 near Fort Macleod, the Highway 2/3 Interchange structure near Fort Macleod and the Highway 16/41 Interchange structure south of Vermilion.

The department established a "Partnership" relationship with the roadbuilding industry in the area of specification development whereby the Alberta

Roadbuilders and Heavy Construction Association were enlisted to provide formal input on all significant specification issues at the development stage. Annual seminars with the industry to discuss major specification changes and obtain feedback were continued.

During this fiscal year, there was a continuing emphasis on construction safety through the implementation of the Safety Prequalification Program. Effective January 1, 1994 contractors wishing to bid on department construction contracts estimated to be greater than \$100,000 were required to have received certification by the Alberta Construction Safety Association.

TECHNOLOGY DEVELOPMENT AND TRANSFER

The department has a strong commitment to develop and implement technical solutions that enhance the efficiency and effectiveness of the services it delivers and actively support the departmental goals. A number of factors characterize the department's technology development activities. Firstly, priorities are guided by three-year plans, developed with input from an advisory committee which has representation from across the department. Opportunities for co-operative projects with other jurisdictions and agencies are actively sought to encourage technology transfer and elicit support for the department's investment. Finally, information sharing and technology transfer across the department's decentralized organization are high priorities.

In 1993/94, the department continued its partnership in the Canadian and U.S. Strategic Highway Research Programs which are investigating asphalts, pavements, concrete structures and highway maintenance operations. For a modest investment, access is gained to the results and technologies from this almost \$200 million international co-operative research effort. With the conclusion of these two programs at the end of 1993/94 fiscal year the department committed itself to participate in a new program starting April, 1994 that will put the research findings into practice and realize the expected savings to the department of many millions of dollars in constructing and maintaining the highway infrastructure. Other co-operative research, which levered up the departmental research investment, was conducted with the Research and Development Council of the Transportation Association of Canada, the Alberta Research Council, the Forest Engineering Research Institute of Canada and the Universities of Alberta and Calgary.

Improvement to the operational and environmental aspects of the department were important research objectives during 1993/94. These included:

- alternate de-icers for bridge decks
- control of wildlife along highways
- determining the service life of bridge decks
- use of flyash in concrete
- use of carbide snow plow blades.

Adaptation of new and evolving technologies continued to be a high priority. Implementation of satellite technologies for surveying applications was continued, as well the conclusion of the adaptation of this technology for very accurate positioning of our second generation video-log van for collecting highway inventory. This vehicle will be operational early in fiscal 1994/95. Further work was done on automation of some aspects of truck haul to reduce project engineering costs and improve operational safety. An infra-red intrusion alarm and several designs of portable rumble strips were evaluated to protect maintenance crews working on highways.

Technology transfer and putting innovative ideas into practice continued to be priorities. The Transearch publication continued to be produced for a fifth year. The fourth Technology Transfer Workshop was held in Lethbridge. This workshop is aimed specifically at transferring and sharing applied research and new technologies with field staff.

Work was started on the use of the electronic medium, through the use of a computer based bulletin board, for the tendering of departmental highway construction projects.

PROPERTY SERVICES AND RIGHT-OF-WAY ACQUISITION

As the department's focus changes from construction of new roadways to maintenance of existing infrastructure, the requirements for right-of-way have also changed. Working with Regions, Property Services continues to examine department requirements in terms of right-of-way acquisitions, property holdings for future development, and disposition of surplus property.

Further development of the Automated Land Inventory System (ALIS), an electronic data base, assists in the management of 2050 parcels of land consisting of 26 900 acres. During the year 111 parcels of land were determined to be surplus of which 39 parcels were sold for \$700 000 using private sector Realtors with the Alberta Real Estate Association.

To support upgrading to the primary highway system, acquisition of right-of-way is needed for Highway 2 and 2A between Red Deer and Calgary; and several projects in the south region such as Highway 3 (continuation of the Export Highway) and the Fort Macleod Interchange.

The department completed acquisition of the former Canadian Pacific Railway right-of-way from 82nd Avenue to Jasper Avenue in Edmonton to ensure its availability for future development. The protection of this alignment will provide opportunities for possible development of high speed rail and/or major pedestrian links within the urban area.

Negotiations with the First Nations groups for right-of-way continued this year. Highway routes 901 and 88 involved settlement agreements with the Siksika and Tall Cree Reserves respectively.

FLEET & MATERIALS

Equipment, Supply and Services provides fleet, material and shop services to the department through the Transportation Revolving Fund on a cost recovery basis. Activities during 1993/94 included:

- integration of Central Vehicle Services group and the Executive Fleet group from Alberta Public Works, Supplies & Services (APWSS) into AT&U, which combines all government fleet and equipment management services and has provided a substantial savings to the government
- department equipment fleet was reduced significantly as a result of the Improvement District (ID) conversion as well as a 25 per cent Fleet Reduction Program involving the Central Vehicle Operations' fleet.
- development and implementation of a Fuel Program resulting in approximately 90 per cent fuel privatization and the closure of 170 fuel sites.
- apprentice attrition has been substantial with the completion of the Government Apprenticeship Program (GAP), which resulted in the reduced availability of 30 apprentices and associated downsizing of the AT&U Apprenticeship Program by over 50 per cent.
- completion of the Clean Air Strategy of Alberta (CASA) report for fleet fuel efficiency improvement which was presented to the CASA Board for endorsement.

- a business process re-engineering project for Equipment, Supply and Services was initiated to reduce expenditures, maximize effectiveness of remaining resources, streamline administration structures, examine core business, and improve service delivery to our customers.

MUNICIPAL INFRASTRUCTURE

CITY TRANSPORTATION

The Government of Alberta has been providing financial assistance to urban centres since 1931 to develop and operate effective and efficient roadway and public transit systems. Over the years, the grant programs have been evaluated and adjusted to respond to the challenging needs of Alberta cities and the fiscal capacity of the government.

The Alberta Cities Transportation Partnership, originally announced in 1988, is the program that provides financial assistance to the major urbanized centres in Alberta. In 1993/94, \$79 million was allocated to assist 16 cities and the Urban Services Area of Sherwood Park. In 1991, the government announced that the Alberta Cities Transportation Partnership would be an ongoing multi-year program, effective April 1992, to allow cities to plan long-term transportation construction projects and to reflect current economic conditions.

In 1993/94, grants totalling \$79 million were disbursed to each eligible municipality as follows:

Airdrie	471 762
Calgary	34 158 380
Camrose	476 345
Drumheller	215 345
Edmonton	27 756 666
Fort McMurray	542 149
Fort Saskatchewan	449 791
Grande Prairie	1 116 233
Leduc	419 864
Lethbridge	2 513 274
Lloydminster	343 029
Medicine Hat	1 666 836
Red Deer	2 342 338
Spruce Grove	429 733
St. Albert	1 634 267
Wetaskiwin	353 341
County of Strathcona (Sherwood Park)	1 612 213
	\$ 76 501 566

Public Transit Operating Grants to Towns, Villages, Counties, M.D's, etc	2 536 366
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Multi-jurisdictional projects	117 129
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TOTAL GRANTS	\$ 79 155 061
=====	=====

The Alberta Cities Transportation Partnership is comprised of four grant components:

Capital Grants

- Basic Capital
- Primary Highway Connectors

Operating Grants

- Primary Highway Maintenance
- Public Transit Operating - distributed through the Alberta Partnership Transfer Program

Figure 1 illustrates the overall distribution of total grant disbursements in 1993/94.

ALBERTA CITIES TRANSPORTATION PARTNERSHIP
DISTRIBUTION OF 1993/94 GRANT DISBURSEMENTS

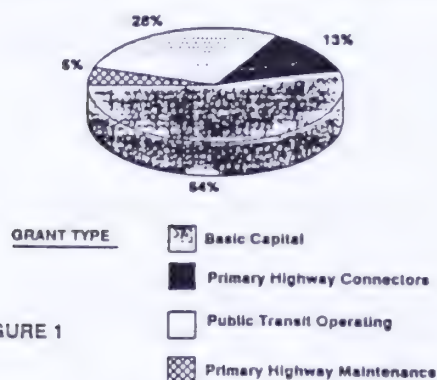


FIGURE 1

1993/94 MAJOR PROJECTS/EVENTS

CALGARY

- Continuing construction of the interchange at John Laurie Boulevard and 14 Street N.W.
- Purchase of 51 new transit buses with easier access features.
- Extensive overhaul of the city's L.R.V's
- Continuing construction of Beddington Trail/Country Hills Boulevard from Deerfoot Trail to 14 Street N.W.

EDMONTON

- Construction is continuing on major projects:
 - Whitemud Drive/Calgary Trail Interchange
 - Capilano Drive extension including an interchange at Yellowhead Trail
 - Purchase 43 of 59 low-floor, fully accessible transit buses
 - Construction on 104 Avenue/105 Street from 104 Street to 111 Street
 - Completion of the construction of south

L.R.T. from Corona to University Station

LETHBRIDGE

- Rehabilitation of Highway 3/Oldman River Bridge
- Rehabilitation of 43 Street, northbound lanes, from Highway 4 to 1st Avenue South

RED DEER

- Construction of 30 Avenue from 32 Street, 600 metres south
- Construction of 32 Street from 30 Avenue to Douglas Street

ST. ALBERT

- Purchase of three additional low-floor transit buses

MEDICINE HAT

- Rehabilitation of Gershaw Drive and Highway 3
- Purchase of Orion Bus

SHERWOOD PARK

- Continuing construction of Cloverbar Road from Wye Road to Granada Boulevard to Colwill Boulevard
- Rehabilitation of Sherwood Drive
- Design of Township Road 522 from Highway 14 to Highway 21

FORT McMURRAY

- Rehabilitation of Cornwall Drive and Tundra Drive
- Transit Fleet Replacement

GRANDE PRAIRIE

- Continuing construction of Highway 2 Bypass
- Overland and rehabilitation of several roadways

LEDUC

- Overlay of 45 Street from 46 Avenue to 65 Avenue

CAMROSE

- Signalization and realignment of 48 Street and 48 Avenue
- Reconstruction of 39 Street from 42 Avenue to 44 Avenue

AIRDRIE

- Overlay of East Lake Boulevard
- Rehabilitation of Main Street

SPRUCE GROVE

- Intersection improvements at Calahoo Road and McLeod Avenue

FORT SASKATCHEWAN

- Continuing rehabilitation work of Highway 15/21, Phase II

LLOYDMINSTER

- Reconstruction of 75 Avenue from 44 Street to 67 Street

DRUMHELLER

- Purchase of new Handi-bus

RURAL TRANSPORTATION

Streets Improvement Program

Implemented in 1989, the Streets Improvement Program provides formula-based, cost-shared funding to Alberta towns, villages and summer villages for the construction of lasting street improvements. This program enhances the quality of life in smaller urban centres; creates employment in the construction industry; and enables municipalities to attract industry and new development.

Projects such as grading, gravelling, base course paving, sidewalks, curb and gutter, roadway drainage and related works were funded during the fiscal year. During 1993/94, approximately \$11 million was provided to 96 municipalities for the construction of 96 street improvement projects, including major paving programs in Legal and Whitecourt.

The Community Safe Streets Program, a component of the Streets Improvement Program, was also implemented in 1989 to provide additional funding for towns, villages and summer villages to construct roadway facilities. Projects such as traffic control devices, improved street illumination, wheelchair ramps and sidewalk improvements, as well as pedestrian crosswalks were funded under the program. During the 1993/94 fiscal year, \$500 000 was provided for 32 municipalities to undertake 32

projects, including sidewalks and barrier-free ramps in Coalhurst and a pedestrian crosswalk in Grande Cache.

A number of initiatives were undertaken during the year related to transportation of seniors and persons with disabilities. Municipal Services provided support and advice on various initiatives, as well as to the department's advisory committee on Barrier-Free Transportation.

Road Grants to Municipal Districts, Counties and Special Areas

Each municipal district, county and the special areas are provided with an annual formula-based grant to develop and upgrade their local roadways to a uniform standard. Funds are provided for projects such as grading, gravelling, base course, dust abatement, and related engineering costs.

During 1993/94, the program review continued with an emphasis on certain formula parameters, eligibility criteria, and the impact of reduced budgets. Recommendations were developed and changes have been implemented for the 1994/95 fiscal year.

Grant dollars provided under the various program components are detailed below:

Rural Transportation Grants (includes regular road grants and the previous engineering assistance and dust abatement grants)	
Hamlet Streets Assistance Grant	\$25 113 834
Discretionary Grants	53 268
	1 381 949

\$26 549 051

MUNICIPAL WATER AND WASTEWATER ASSISTANCE

Alberta Municipal Water/Wastewater Partnership

Announced in April 1991, the Alberta Municipal Water/Wastewater Partnership provides cost-shared funding to Alberta cities (under 45 000 population), towns, villages, summer villages, regional commissions, and eligible hamlets within rural municipalities for the construction of high-priority municipal water supply and treatment and wastewater treatment and disposal facilities. Funding is provided on a project-by-project basis with the cost-sharing

ratio being calculated by population. Communities under 1000 are eligible to receive a maximum grant of 75 percent, with lesser grants being provided to larger centres depending on their population.

During 1993/94, approximately \$24 million was provided to 160 municipalities to undertake 215 projects under the program including a raw water reservoir construction in Grassy Lake and a major wastewater treatment upgrading in Wainwright.

MOTOR TRANSPORT SERVICES

PROTECTION OF HIGHWAY INFRASTRUCTURE

In recognition of current fiscal restraints and a shifting business focus, Motor Transport Services moved away from direct delivery and more towards partnerships with industry and other jurisdictions to deliver safety and compliance programs.

While the establishment and monitoring of standards continue to be a focus there was increased consultation with the private sector to develop standards.

With increased consultation from the trucking industry, programs directed toward the protection of the current investment in the province's highway and bridge infrastructure, as well as the safety of the motoring public continued.

Continued expansion of the high-load transport corridor took place in the Drayton Valley area. During this same year SH 621 and 753 between Highway 22 and Highway 16 were added to this corridor. To assist the drivers of log trucks in identifying approved routes and to show the maximum allowable winter weights on those routes, a system of colour coded maps was introduced. Following a pilot project in 1992/93, these maps were produced for all of the log haul carriers in the province.

The next phase of the Transportation Association of Canada (TAC) Weight and Dimension Standards was implemented for straight trucks and trucks with trailers. Efforts continued to standardize vehicle weight and dimension requirements throughout Canada by amendments to the national agreement on inter-jurisdictional travel.

Energy Efficient Motor Vehicles operation and requirements were reviewed and revised with industry to provide better utilization of existing equipment while maintaining and enhancing vehicle safety.

Ongoing consultation and assistance was provided to Improvement Districts that were assuming control over their road network regarding optimizing infrastructure protection while maintaining a free flow of goods and services.

Permit volumes have increased an average of 10 per cent which reflects industry and economic progress.

Negotiations continued with US States to enter into an agreement that would allow heavier and longer trucks to haul more goods cost-effectively north/south along designated trade corridors. The benefits for both Canada and the US would be substantial in terms of transport cost savings and increased trade and for shippers and carriers.

CARRIER SERVICES

Significant re-engineering of program delivery was required during this fiscal period in order to accommodate rightsizing initiatives. While large reductions in manpower and overall budget were achieved, no carrier service programs were discontinued. Among the initiatives to reduce costs were shortening the hours of service where there was least impact, the amalgamation of the Support Services and Transport Field Operations into Carrier Services, and a reorganization that placed greater emphasis on a proactive approach to regulatory compliance.

The commitment to the National Safety Code (NSC) remained in the forefront of both administrative and enforcement activities. As there are more than 20 080 carriers in the program in Alberta, much effort went into program maintenance. Approximately 3900 new Alberta based carriers were added to the program this year.

There were 2200 new applications processed for commercial bus and truck operating authorities and an additional 2042 existing authorities renewed.

To assist the Minister and Motor Transport Services management in balancing the need to enforce the regulations and the carrier industry need for flexibility and productivity, 18 industry advisory committees were established throughout the province. The committees were successful in resolving local area problems as well as in bringing several province-wide concerns forward.

Carrier compliance activities focused on the development of a violation program whereby all motor carrier violations would be captured on a computer system in order to identify problem areas. A sample of 125 carriers were monitored and the system results were shared with industry representatives for feedback on potential benefits of the program to the carriers themselves. A manual carrier profile system maintained over 20 000 "profiles" of motor carriers. As a result of these profiles, over 1400 carriers were audited and 120 carriers were summoned to discuss problems with

their respective operations and what corrections had to be made.

Negotiations were finalized with United States Department of Transport officials and international audit standards which meet the needs of the NSC and SafetyNet and were agreed to. United States officials now accept Canadian audits, thereby reducing the need for United States auditors to visit Alberta trucking firms.

During the period, there were over 125 300 permits issued to regulate and control the movement of oversize loads on Alberta highways. The total revenue generated from permit sales and user fees amounted to \$11 945 000. This amount represents a return from fees of 84 per cent of the Motor Transport Services budget.

Educational seminars continued to be offered to local governments and the commercial transport industry on topics related to highway safety and protection of highways related to overloaded vehicles.

SAFETY

Collision Reduction

The Alberta Traffic Collision Information System (ACIS) continues to provide information to support and implement road safety benefits and reduce traffic collisions in the province. The safety area also provides investigation, information and analysis for both immediate action programs and long term traffic safety issues.

The overall number of collisions has declined from 1992. In 1993 there were 84 588 traffic collisions in Alberta. There were 383 persons killed and 19 252 persons injured.

Alberta continues to maintain and strengthen our partnerships with others in the road safety community. Several safety initiatives resulted in policies, procedures, and regulations being amended in consultation with the province's commercial trucking and school bus industries. These initiatives have assisted in the safe movement of goods and people in Alberta.

Safety Standards and Records

With the Commercial Vehicle Inspection Program (CVIP) now in place for more than two years, there were 1837 privately licensed inspection stations utilizing 4256 licensed mechanics by the end of the 1993/94 year. A total of 84 656 inspection

certificates were processed under this program. Total license revenues from station and mechanic licenses during this period was approximately \$200 000.

Four Commercial Vehicle Safety Alliance (CVSA) inspection buildings continue to be in use at Coutts, Balzac, Leduc and Slave Lake.

The Written-Off Vehicle Inspection Program, designed to prevent poorly repaired vehicles from being sold or driven subsequent to being written-off after major collision damage, was continued. Approximately 3488 inspections were completed under this program, which is delivered through 175 privately licensed inspection stations and 753 licensed mechanics.

Rail Safety

A safety program has been developed with the intent to monitor performance and maintenance of safe plant sites for railways under provincial jurisdiction. This jurisdiction extends only to those railways that operate solely within the province. To date this includes only the Central Western Railway Corporation which operates a short-line railway and Alberta Prairie Steam Tours which uses Central Western Railway trackage from May to October each year.

The safety program included spot inspection and audit of tracks, right-of-way, bridges, signals, locomotives, rolling stock and operations to establish compliance with standards and legislation. Safety deficiencies and concerns were identified, recommendations were made, interim measures were ordered and compliance was monitored on a regular basis.

Work continues on the development of legislation that will serve the provincially-supervised railway industry in the future.

Safety Education

The use of departmental safety education programs by schools and industry continued to expand during this fiscal year. As schools became more familiar with the new self-delivery format of our programs, we experienced a 300 per cent increase in demand over the previous 1992/93 fiscal year.

The community based programs cover such topics as school bus safety, bicycle safety, winter driving and seat belts. They consist of an instruction manual, reference material, student activities and either a video or a list of related audio-visual resources. The Mobile Safety City, which consists of fully

functioning traffic signals to provide an inter-active pedestrian learning environment for young children, has also been modified to allow for self-delivery by communities. The Safety Code Society of Medicine Hat, together with the Alberta Motor Association plan to use these components in education programs in rural schools in the southeast part of the province on a trial basis. Safety Education Programs work with community groups in Lethbridge and Fort McMurray to establish permanent-site safety cities.

Safety Education Programs has also developed and implemented a child car seat instructor's program which provides a high level of training to health professionals from hospitals and health units and also to enforcement personnel from the RCMP and municipal police services. The popularity of this program spread through word-of-mouth and has resulted in waiting lists across the province. Other groups such as social workers and paramedics have expressed an interest in receiving this level of instruction. A total of 398 individuals received training during the 1993/94 fiscal year. In March of 1994, an instructor's certificate of course attendance was added to the one day formal curriculum. This course has the support and endorsement of the Alberta Coalition on Child Passenger Restraint, and is currently being reviewed by Transport Canada.

ALBERTA MOTOR TRANSPORT BOARD

The Board continues to advance a program of regulatory reform for both the intra and extra provincial motor carrier industry operating in Alberta. This program is intended to decrease economic controls while concentrating on the delivery of safety standards affecting the operation of commercial vehicles on Alberta highways.

The Secretariat responded to a number of concerns on issues from both carriers and users of motor carrier services relating to conditions of carriage, legislative requirements and operating practices and procedures.

The scheduled bus industry continues to report a serious decline in ridership throughout rural Alberta. The Board is working closely with the industry in an effort to assist them in maintaining the level of scheduled bus service which is an essential service to many rural Alberta communities.

The Board continues to develop legislation that will serve the trucking industry by emphasizing ease of entry for carriers and by changing the Board's role which will increase emphasis on operating safety.

During this period, the Board held six Show Cause and one public hearing relating to carrier non-compliance in the trucking and bussing industry. These hearings were in addition to the 48 regular board meetings required to carry out the administration of board responsibilities.

RURAL UTILITIES

RURAL GAS

The Rural Gas Program assists rural Albertans to obtain natural gas service through a rural gas pipeline infrastructure that is unique on a world-wide scale. Grant assistance under this program ensures that natural gas service is available to rural Albertans at a reasonable cost.

	1993/94	Since 1973
Services		
Installed	4 735	148 283
Km of Pipeline	2 475	104 142
Grants Paid	\$7.3 Million	\$397 Million
System Capital		
Cost	\$21 Million	\$703 Million
Fuel Cost		
Savings	\$160 Million	\$2.0 Billion

Several pipeline regulatory functions are carried out under the program, including:

- approval of natural gas franchises
- issuance of pipeline construction permits and operating licenses
- consolidation and publication of public information systems covering rural gas pipelines
- operational and safety inspection of pipeline construction, and utility operations.

Gas Alberta serves as the gas supply broker for most of Alberta's small rural gas utilities. It manages a natural gas supply pool of more than 18 billion cubic feet each year, and uses the economies of scale from this pool to provide rural gas utilities with secure and reliable gas supplies at a reasonable price. In 1993, Gas Alberta raised its price for gas supplies by \$1 per gigajoule to reflect the substantial upswing in natural gas market prices during the previous year. This increase was comparable to increases by Alberta's investor-owned utility companies.

REMOTE AREA HEATING ALLOWANCE PROGRAM

The Remote Area Heating Allowance Program reduces the cost of propane and heating oil for those Albertans who reside outside natural gas franchises or in remote areas and are, therefore, unable to obtain

natural gas service.

Rebates Paid in 1993/94	No. of applications Received in 1993/94
\$263 054	1010

RURAL ELECTRIFICATION PROGRAM

The Rural Electrification Program has provided financing for new electrical service for Alberta's farmers for over 40 years. Approximately \$195 million in loans has been issued for new farm services since the program's inception.

The program's lending activities were extended in 1987 to assist rural electrification associations (REAs) with the rebuilding of their distribution systems.

Loans Issued in 1993/94	Number of Loans	\$
Individual Farm Services	409	\$1 762 260
REA's (Rebuild of Dist. System)	49	\$1 129 960

Repayments of principal and interest to the Rural Electrification Revolving Fund during the year amounted to approximately \$4 million. This left a balance of approximately \$20 million in outstanding loans receivable for the Fund, net of loan discounts and bad debt allowances.

ADMINISTRATIVE SERVICES

As the department re-organized and business requirements changed, the administrative support functions had to respond quickly to ensure that operations would continue in an efficient, orderly fashion. Some of the accomplishments that resulted are listed as follows:

SUPPORTING REORGANIZATION:

- Personnel Management Services partnered with Regional to redeploy employees affected by the closure of the Airdrie, St. Paul and Stettler offices. In conjunction with business planning activities, assistance with planning human resource strategies was provided to various regions throughout the year.
- Facilities Planning was actively involved with the Regions' plan to restructure and consolidate district and construction office operations, resulting in fewer offices and overall annual operating cost reductions of approximately \$100 000.
- With the retirement of the Director of General Services, functions within this area were distributed between Financial Services, Personnel Management and Information Systems. The duplication centre, stationery acquisition and supply, mail and courier services, and risk management and insurance services were amalgamated with Financial Services; Facilities Planning aligned with Personnel Management; and Library and Record Services with Information Systems.
- A Cross Training Program for Technologists was developed to provide Equipment Operator skills to employees who had worked as Technologists in the past and who needed new skills to remain with the department. There is a desire by Regional to repeat the program again in the 1994/95 winter season with a view to expanding to further classifications.
- Financial Services developed a course to improve the knowledge of financial policy and controls of those employees who are responsible for committing the department to the procurement of and payment for goods and services.
- Blueprint services, previously performed by the department, were privatized at considerable savings.

PROCESS AND SYSTEMS IMPROVEMENTS:

- Implementation of an additional module of the Financial Reporting and Control System was begun with Equipment Supply and Services who process 30 per cent - 40 per cent of the accounts payable documents in the department. Implementation in the balance of the department will occur early in the new fiscal year.
- Administration along with representation from across the department partnered with Alberta Treasury Payroll to implement enhancements to the Alberta Government Payroll System. These enhancements streamlined administration requirements associated with payroll processing.
- New standards were developed to reduce the amount of administrative processes associated with the payment of invoices.
- To eliminate unnecessary duplication of records associated with the Transportation Revolving Fund, financial records for the Transportation Revolving Fund were centralized.
- As the department continued to exploit data processing technology in support of its business plan, the following progress was made:
 - electronic mail and a high speed link to the Motor Transport offices in Red Deer were installed to speed communications.
 - the Automated Land Information System (ALIS) was extended to support requirements in regional and district offices.
 - decentralized data entry facilities were added to the Financial Reporting and Control system to reduce paper flow and to capture data closure to its source. This same system was also modified to accommodate on-line payroll transactions.
 - the Equipment Management System was modified to recognize the transfer of Central Vehicle Fleet operations to the department.
 - work also began on a Geographic Information Management System (GIMS) which will improve the ability to access and manipulate data that is used in the planning, construction and operation of the provincial transportation network.

INVOLVEMENT ACROSS GOVERNMENT:

- Transportation and Utilities holds approximately 48 per cent of the capital assets for the province. As the government began to change how it accounts for its assets, the department has taken the lead role in assembling and compiling the information required to report these assets. Finance continues to work with operational areas to define and implement the policy and changes required in budgeting and accounting capital assets.
- The department participated in a cross-government committee to develop a Back Care Program for all government departments.

INTERNAL AUDIT

Internal Audit Services (IAS) provides managers with an assessment of the adequacy of internal control, including an evaluation of the effectiveness, and the efficiency, of operations.

In 1993/94 33 audits were commenced including two Engineering Reviews. Engineering reviews were conducted in Olds (Southern Region) and High Prairie (Peace Region). Audit activities also included an examination of Municipal Agreements in five districts in the province. By year end, 22 audits were completed.

An audit review of Consulting Agreements, which was originally commenced in 1992/93, was also completed during this year.

APPENDICES

ORGANIZATIONAL ROLES IN ALBERTA TRANSPORTATION AND UTILITIES

Responsibilities are noted under each agency, division and branch.

MOTOR TRANSPORT

BOARD

- regulates motor carriers which includes the intra and extra provincial truck and bus industry; within the framework of the Alberta Motor Transport Act, and as delegated to the Board by the Federal Motor Vehicle Transport Act, 1987.

SERVICES

- ensures a safe and effective surface transportation user environment based on the optimum use of transportation resources while minimizing abuse of the transportation network. Develops and implements standardized legislation, regulations, and operating practices on the international, national and provincial level leading to uniform and safe standards for the movement of people and goods.

CARRIER SERVICES

- provides administrative, communications and training, and operational support services within the division.
- provides for permit issuance and division finance and revenue collection.
- provides secretariat services for Motor Transport Board operations.
- ensures public vehicle compliance with applicable Provincial/Federal Statutes and Regulations.
- integrates Alberta's co-operative efforts to develop a uniform program of enforcement that is firm yet fair across North America.
- provides joint vehicle compliance services with Montana in support of the North American Free Trade Agreement and as a model for inter-jurisdictional co-operative enforcement services between Canadian provinces.
- provides planning, research, business analysis and policy development to the division.

TRANSPORTATION SAFETY

- provides direction and leadership to ensure the safe transportation of people and goods on Alberta's highways.
- administers Alberta's Railway Legislation as it pertains to safety and operating practices on non-federally chartered railways.
- takes positive, pro-active steps to reduce motor vehicle collisions and their accompanying injuries and fatalities.
- administers the NSC and integrates Alberta's programs into national and international heavy truck safety efforts.
- operates the Alberta Collision Information System (ACIS).
- provides one stop shopping for a wide variety of statistics and other information related to the motor transport industry.

ENGINEERING SERVICES

- develops weight and dimension regulations, policies and procedures which balance highway user needs with the physical capabilities of the road to provide a high standard of highway safety.
- integrates Alberta's weight and dimension standards with international and national bodies to develop effective and uniform regulations and codes of practice for North America.
- provides consultative advice to industry on evaluation of equipment and standards.
- provides additional seasonal protection for highways by using a system of winter weights, road bans and permits.

INTERNAL AUDIT SERVICES

- provides the department with a means of assessing the effectiveness and efficiency of its operations.

LEGAL SERVICES

- provides legal services to the department through seconded Justice Department employees.

PUBLIC COMMUNICATIONS

- provides public relations counsel and communications services supporting departmental policies, programs and activities.

PLANNING AND DEVELOPMENT

POLICY

- recommends changes to Alberta policies and programs responding to user, fiscal and other identified needs.
- recommends Alberta input into national policies and programs affecting all modes of transportation serving Alberta industry, business and residents.
- co-ordinates department-wide initiatives such as strategic planning, accessibility, deregulation, etc.

PLANNING

- manages the pre-engineering stage of highway capital projects to ensure that plans meet highway user and local needs at the lowest possible cost.
- responds to safety and traffic statistics, and municipal, landowner and developer issues by developing site-specific functional plans.
- manages roadside development and access to the primary highway system.
- reviews long range needs for Alberta's highway network.

URBAN TRANSPORTATION

- manages the Alberta Cities Transportation Partnership Program.
- liaises with city officials on project priorities and plans, ensuring that Alberta's roads are developed as an integrated urban and rural system.
- co-ordinates provincial initiatives, such as barrier-free transportation, with cities.

RURAL UTILITIES

- manages Rural Gas grants, Rural Electrification loans and grants, and Remote Area Heating Allowance grants.

- manages Gas Alberta which provide a gas brokerage and retail billing service to rural distributors on a cost recovery basis.
- oversees safety of rural gas distribution systems.

ADMINISTRATION

- provides administrative support services necessary for the delivery of departmental programs.

FINANCE AND OFFICE SERVICES

- provides financial planning co-ordination and a controllership function aimed to ensure efficient and effective financial policies, procedures and controls, as well as insurance and office support.

EQUIPMENT SUPPLY AND SERVICES

- provides fleet, materials and shop services, supporting the department's operations.

INFORMATION SYSTEMS

- provides computer technology expertise and support aimed to enhance the productivity of those involved in the delivery of department programs.

PERSONNEL MANAGEMENT

- provides expert personnel management services aimed to enhance the effectiveness of the human resources of the department.
- provides accommodation and facilities planning.

PROPERTY SERVICES

- provides policy development and standards for land acquisition and management and monitors the property administration process.

REGIONAL TRANSPORTATION

- through a decentralized framework of four transportation regions, 10 districts, and three sub-

districts, is responsible for the delivery of the department's capital construction (roadway, bridge and airport) and maintenance programs.

REGIONS AND DISTRICTS

- provides roadside management and field implementation for the delivery of construction and maintenance of the provincial transportation system (includes primary highways, improvement district roads, ferries, airports and rest areas).
- provides front line service to Albertans at the local level.

TRANSPORTATION PROGRAMS

- responsible for the development of capital construction and rehabilitation programs.
- maintains inventories of road systems.
- responsible for scheduling and fiscal control of construction, rehabilitation and maintenance programs.
- provides head office co-ordination of the primary highway and improvement district road maintenance programs.
- monitors current year's project schedules and costs.
- responsible for ferry and rest area operations.

MUNICIPAL SERVICES

- delivers a variety of financial, technical and advisory services to cities, towns, villages, summer villages, municipal districts, counties and special areas with respect to transportation and utilities infrastructure.
- responsible for provincial airport operations.

ENGINEERING

- provides engineering, contract administration and research standards and services in support of departmental construction, maintenance and other programs, and delivery of the department's major bridge construction programs.

BRIDGE ENGINEERING

- provides engineering for and delivery of the department's major capital and maintenance bridge programs, and engineering support for regional bridge activities.

CONTRACTS ENGINEERING

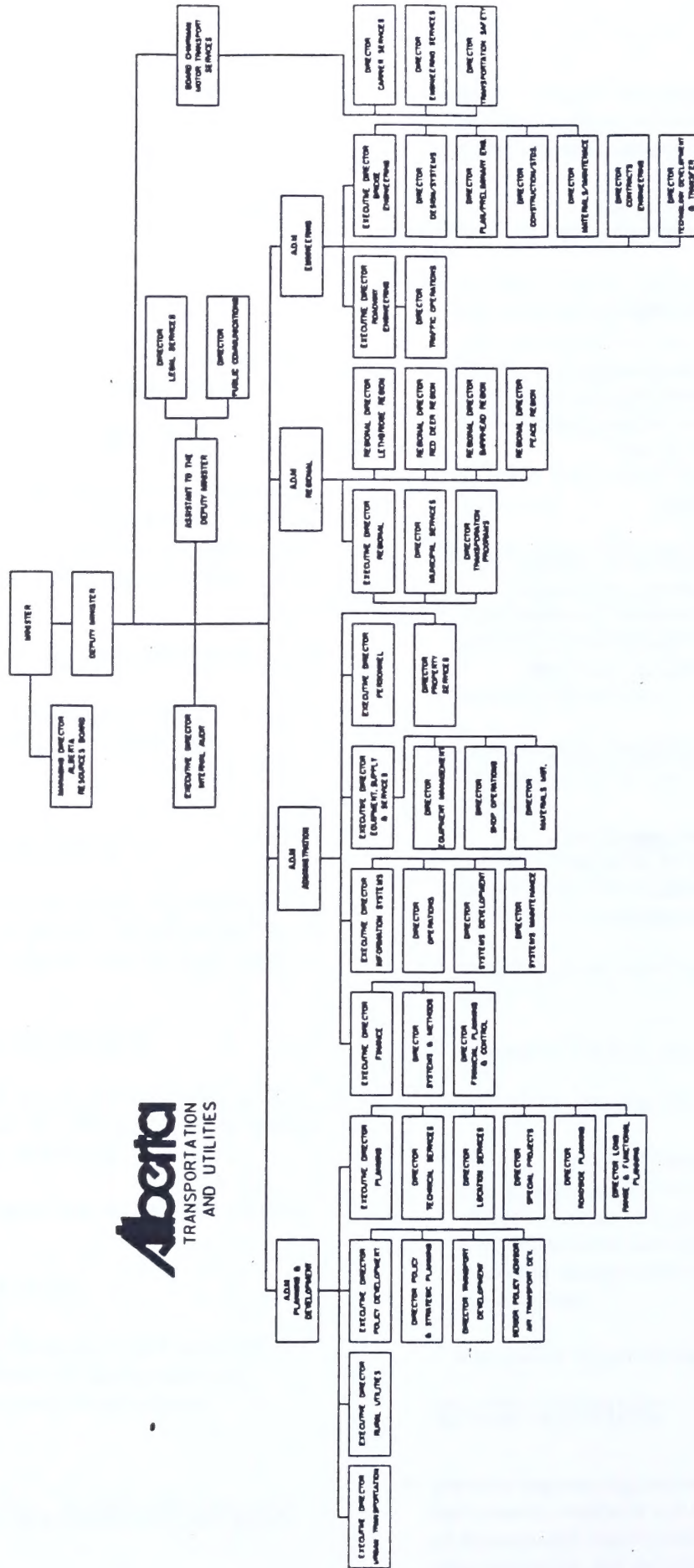
- provides contract administration and environmental co-ordination standards and services for the department's construction, maintenance and other programs.

ROADWAY ENGINEERING

- provides standards and services in roadway design, pavement management, geotechnical engineering, aggregates resource co-ordination, materials and construction quality control and assurance, utilities co-ordination and traffic engineering.

TECHNOLOGY DEVELOPMENT AND TRANSFER

- plans and manages applied research and technology transfer programs to support the department's construction, maintenance and other operations.



Prepared by Program Services Branch

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FINANCIAL STATISTICS

ALBERTA TRANSPORTATION AND UTILITIES REVOLVING FUND OPERATIONS YEAR ENDED MARCH 31, 1994

(amounts in millions of dollars)

	1994	1993
Transportation Revolving Fund:		
Total Assets	\$ 111.3	\$ 85.7
Current Liabilities	4.6	6.4
Advances from the Province of Alberta (maximum \$200 million)	103.7	78.6
Surplus (deficit)	3.0	0.7
Revenue	63.5	49.4
Expenses	61.2	48.7
Net Income (Loss) for the year	\$ 2.3	\$ 0.7

Gas Alberta Operating Fund:

Total Assets	\$ 14.1	\$ 9.9
Current Liabilities	6.7	4.4
Advances from the Province of Alberta (maximum \$12 million)	9.0	6.5
Surplus (deficit)	(1.6)	(1.0)
Revenue	38.9	25.4
Expenses	39.5	28.7
Net Income (Loss) for the year	\$ (0.6)	\$ (3.3)

**ALBERTA TRANSPORTATION AND UTILITIES
GENERAL REVENUE FUND
YEAR ENDED MARCH 31, 1994**



**BUDGET ESTIMATES, SPECIAL WARRANTS, TRANSFERS AND EXPENDITURES
(CLASSIFIED BY CONTROL GROUP)**

(amounts in thousands of dollars)

	Budget Estimates	Prior Year Liability	Special Warrants	Transfers	Total Authorization	Actual Expenditures
Manpower	\$ 125 627				\$ 125 627	\$ 115 884
Supplies and Services	355 617				355 617	330 511
Grants	155 737				155 737	157 680
Capital Assets	8 840				8 840	8 316
Other	45				45	46
	\$ 645 866				\$ 645 866	\$ 612 437
Operating	\$ 315 960				\$ 315 960	\$ 315 376
Capital	329 906				329 906	297 061
	\$ 645 866				\$ 645 866	\$ 612 437

**REVENUE
(CLASSIFIED BY SOURCE)**

	1994	1993
Payments from the Government of Canada	\$10 294	\$ 939
Fees, Permits and Licenses	12 242	7 969
Refunds of Expenditure	2 701	2 397
Cost sharing agreements	1 752	(247)
Sales of assets and other revenues	1 933	1 717
	\$ 28 922	\$ 12 775